

IN THE CLAIMS:

Please amend claims 23, 31, 35-42 and 44-47; cancel claim 24; and add claim 48, so that the pending claims read in accordance with the following listing of claims, which shall replace all prior versions, and listings, of claims in this application:

23. (Currently Amended) A method for generating acknowledgement messages ~~in a data transmission system having a receiver for comprising:~~
~~_____receiving a series of datagrams; and being capable of~~
~~_____determining which of said series of datagrams have been incorrectly received;~~
~~the method comprising;~~
~~_____generating a plurality of a data units, each data unit comprising:having~~
~~_____a status bit indicative of the status of the data unit; and~~
~~_____a plurality of spacing bits together forming a binary representation of a~~
~~number indicative of the spacing between one incorrectly received datagram and a~~
~~succeeding incorrectly received datagram; and~~
~~_____assembling said plurality of data units together into an acknowledgement~~
~~message.~~

24. (Cancelled)

25. (Previously Presented) A method as claimed in claim 23, wherein one value of a status bit is indicative of its corresponding data unit not being the last data unit of a set of consecutive data units whose spacing bits together represent a number indicative of a spacing between one incorrectly received datagram and a succeeding incorrectly received datagram.

26. (Previously Presented) A method as claimed in claim 23, wherein the other value of a status bit in a datagram whose spacing bits represent a predetermined number is indicative of adjacent data units representing a number indicative of a number of consecutive incorrectly received datagrams.

27. (Previously Presented) A method as claimed in claim 26, wherein the said predetermined number is zero.

28. (Previously Presented) A method as claimed in claim 23, wherein an acknowledgement message includes data identifying the set of datagrams whose reception is described by the message.

29. (Previously Presented) A method as claimed in claim 23, wherein each data unit consists of four or more bits.

30. (Previously Presented) A method as claimed in claim 29, wherein each datagram consists of four bits.

31. (Currently Amended) A method as claimed in claim 23, comprising the further step of generating and transmitting said acknowledgement message comprising the plurality of data units and transmitting that message to a transmitter of the datagrams.

32. (Previously Presented) A method as claimed claim 23, wherein the communication link from the transmitter to the receiver comprises a radio link.

33. (Previously Presented) A method as claimed in claim 32, wherein the radio link is a cellular telephone radio link.

34. (Previously Presented) A method as claimed in claim 33, wherein the radio link is a wideband code division multiple access link.

35. (Currently Amended) An apparatus ~~receiver~~ for receiving a series of datagrams from a transmitter, comprising:

a datagram checking unit configured to determine which of the datagrams have been incorrectly received; and

an acknowledgement message generator configured to generate acknowledgement messages, each acknowledgement message comprising a plurality of a data units, each data unit comprising:

a status bit indicative of the status of the data unit; and

a plurality of spacing bits together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram.

36. (Currently Amended) An apparatus ~~receiver~~ as claimed in claim 35, comprising a transmitting unit configured to transmit the acknowledgement messages to a transmitter.

37. (Currently Amended) An apparatus ~~A receiver~~ as claimed in claim 35, comprising a memory connected to the datagram checking unit configured to store information indicating which of the datagrams has been incorrectly received.

38. (Currently Amended) An apparatus ~~A receiver~~ as claimed in claim 35, wherein each datagram comprises checksum information and the datagram checking unit is capable of calculating a checksum for a received datagram and comparing that checksum with the checksum information comprised in the datagram to determine whether the datagram is correctly received.

39. (Currently Amended) An apparatus ~~A receiver~~ as claimed in claim 35, wherein each data unit consists of four bits.

40. (Currently Amended) An apparatus ~~A receiver~~ as claimed in claim 35, wherein the acknowledgement generator is implemented in hardware.

41. (Currently Amended) An apparatus ~~A receiver~~ as claimed in claim 35, wherein the ~~receiver~~ apparatus is a radio receiver.

42. (Currently Amended) An apparatus ~~A receiver~~ as claimed in any of claim 35, wherein the ~~receiver~~ apparatus is a cellular radio terminal.

43. (Previously Presented) A receiver for receiving a series of datagrams from a transmitter, comprising:

means for determining which of the datagrams have been incorrectly received;
and

means for generating acknowledgement messages, each acknowledgement message comprising a plurality of a data units, each data unit comprising:

a status bit indicative of the status of the data unit; and

a plurality of spacing bits together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram.

44. (Currently Amended) An apparatus comprising:

~~— a datagram checking unit configured to for determining which of a series of datagrams received from a transmitter have been incorrectly received, the apparatus configured to; and~~

~~receive an acknowledgement message generator configured to generate acknowledgement messages, each acknowledgement message comprising a plurality of a data units representative of a spacing between incorrectly received datagrams, each data unit comprising:~~

~~— a status bit indicative of the status of the data unit; and~~

~~determine that each of the data units comprises a plurality of spacing bits together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram and a status bit indicative of the status of the data unit.~~

45. (Currently Amended) An apparatus configured to ~~radio terminal comprising:~~

~~a datagram checking unit configured to determine which of a series of datagrams received from a transmitter have been incorrectly received; and~~

~~an acknowledgement message generator configured to generate acknowledgement messages, each acknowledgement message comprising a plurality of a one or more data units, each data unit comprising:~~

~~a status bit indicative of the status of the data unit; and~~

a plurality of spacing bits, that are together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram by:

if the apparatus determines that the spacing can be represented by the spacing bits of one data unit, generating a data unit that comprises spacing bits representative of the spacing and a status bit having a predetermined value; and

if the apparatus determines that the spacing cannot be represented by the spacing bits of one data unit, generating a plurality of data units that form a sequence in which the spacing bits comprised in the data units of the sequence are together representative of the spacing and each of the status bits comprised in the data units of the sequence has a different value from said predetermined value excepting the status bit comprised in the terminating data unit of the sequence, which has said predetermined value.

46. (Currently Amended) An apparatus configured to:

~~_____communication system comprising a receiver for receiving a series of data units indicative of the spacing between two incorrectly received datagrams in a series of datagrams from a transmitter in a data transmission system, the receiver comprising:~~

~~_____a datagram checking unit configured to determine which the datagrams have been incorrectly received; and~~

~~_____an acknowledgement message generator configured to generate acknowledgement messages, each acknowledgement message comprising a plurality of a data units, each data unit comprising:~~

~~a status bit indicative of the status of the data unit; and~~

~~_____a plurality of spacing bits; and~~

~~_____decode the data units by:~~

~~_____if the status bit of a data unit has one value, determining that the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram is represented by the spacing bits of that individual data unit; and~~

~~_____if the status bit of a data unit has another value from said one value, determining that the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram is represented by the spacing bits of that~~

data unit together with the spacing bits of at least one data unit succeeding that data unit in the received series together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram.

47. (Currently Amended) A computer program product embodied in recorded on a tangible medium readable by a receiver in a data transmission system, said computer program, when executed by the receiver, causing an apparatus the receiver to perform a method for generating acknowledgement messages, the method comprising: in a data transmission system having a receiver for
_____receiving a series of datagrams; and being capable of
_____determining which of said series of datagrams have been incorrectly received;
the method comprising;
_____generating a plurality of a data units, each data unit comprising:having
_____a status bit indicative of the status of the data unit; and
_____a plurality of spacing bits together forming a binary representation of a number indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram; and
_____assembling said plurality of data units together into an acknowledgement message.

48. (New) An apparatus as claimed in claim 46, wherein the apparatus is configured to determine that the at least one data unit succeeding said data unit whose spacing bits together with the spacing bits of said data unit represent the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram comprises:

the next data unit following said data unit in a sequence of received data units to have its status bit set to said one value; and

any data units between said data unit and the next data unit in the sequence of received data units that have their status bits set to the other value.